LRO Study Guide Block V

I. Objective 1a: Identify distribution management policies and procedures

A. Definitions of Distribution

1. Joint Publication 4-0 Joint Logistics: capabilities to move forces and logistics support globally and on time meeting the **required delivery date** and providing time definite delivery to meet the needs of the Combatant Commander

2. Joint Publication 4-09 Joint Doctrine for Global Distribution: in its broadest sense, distribution is the operational process of synchronizing all elements of the logistics system to deliver the **right things, to the right place, and at the right** **time** in order to generate and sustain the military capability required by joint forces

B. Defense Transportation System: that portion of the global transportation infrastructure that supports DOD **common user transportation** needs across the range of military operations

1. U.S. Transportation Command (USTRANSCOM)

a. Provides global transportation management

b. DOD single manager for transportation

c. Serves as the focal point for transportation management for all common user organic and commercial lift

2. Components of USTRANSCOM

a. Military Surface Deployment and Distribution Command (SDDC): provides global **surface** deployment and distribution services to meet the nation’s objectives

i. Operates water terminals, prepares ports for ships and cargo and supervises loading or discharge operations

ii. SDDC is the single sea port manager

b. Military Sealift Command (MSC): supports our nation by delivering supplies and conducting specialized missions across the world’s **oceans**

i. primary advantage is capacity

ii. primary disadvantage is speed

c. Air Mobility Command (AMC): provides global **air mobility**… right effects, right place, right time

i. primary advantage is speed

ii. primary disadvantage is cost

iii. single manager for air mobility

iv. provides airlift, aerial refueling, and aeromedical evacuation

d. Commercial Partner programs

i. Civil Reserve Air Fleet (CRAF): commercial aircraft committed to support the movement of military forces and materiel worldwide through augmentation of the organic fleet

ii. Voluntary Intermodal Sealift Agreement (VISA)

II. Objective 1b: Describe the roles and responsibilities of base level traffic management activities

A. Traffic Management: the movement of DOD passengers (pax), cargo, and personal property—applies directly to the direction, control, and supervision of all functions incident to the procurement and use of freight and passenger transportation services

1. At bases with an AMC Aerial Port Squadron (APS) the APS performs the Traffic Management Functions

2. At bases without an APS, the LRS Deployment and Distribution Flight performs the Traffic Management functions

B. Deployment and Distribution Flight: responsible for the centralized command, control, planning, and execution of wing deployment operations and distribution of cargo, pax, and personal property—performs Traffic Management functions through 3 sections

1. Small Air Terminal and Pax Movement Section: manages base level traffic management activities and **provides core transportation expertise to the Installation Deployment Officer**

i. Pax Movement Element: responsible for providing official travel service for the movement **eligible passengers**—Commercial Travel Office is found in this section

ii. Small Air Terminal Operations Element: manages day-to-day and contingency **air terminal operations**—includes pax and cargo processing and **aircraft handling**

2. Distribution Section: responsible for transportation of **surface cargo and personnel**

i. Cargo Movement Element: responsible for planning, packaging, managing, shipping and receipt of DOD cargo

ii. Vehicle Operations: single source for safe and efficient organic **ground transportation**

3. Personal Property Section: responsible for administering the DOD personal property movement program—**performs government contracting, customs, and agricultural duties**

i. Personal Property Shipping Office (PPSO): provides traffic management, counseling, and application processing within a designated area of responsibility—this is your **local, base level** Personal Property Office

ii. Joint Personal Property Shipping Office (JPPSO): operated by members from **two or more military services** within a specified area of responsibility—this office serves a geographical region

iii. Consolidated Personal Property Shipping Office (CPPSO): performs the same duties as JPPSO but is operated by **one military service**

III. Objective 1c: Describe the importance of Intransit Visibility

A. Definition of Intransit Visibility (ITV): DOD 4500.9R Defense Transportation Regulation (DTR) defines as the **ability to track** the identity, status, and location of DOD units, and non-unit cargo, pax, medical patients, and personal property from origin to consignee or destination across the range of military operations (excludes bulk petroleum, oils, and lubricants)

B. Global Transportation Network: **designated DOD system for ITV**—a single system that integrates information from a variety of DTS automated information systems to provide ITV and Command and Control (C2) data support **in near real time—**GTN does not generate ITV data

C. Total Asset Visibility: the capability to provide users with timely and accurate information on the location, movement, status, and identity of units, personnel, equipment, materiel, and supplies

1. It is the responsibility of units initiating movement requirements to provide accurate information to establish ITV

2. Movements are not considered complete until ITV has been achieved

3. ITV timeline requirements—units must report ITV on the following timelines

i. All unit movements (by sea or air) = 1 hour

ii. All sustainment airlift missions = 1 hour

iii. All intra-theater or CONUS missions = 2 hours

iv. All sustainment sealift missions = 4 hours

IV. Objective 1d: Identify distribution management information systems and policies

A. The following systems feed into GTN and are used to provide ITV

1. Single Mobility System (SMS): a USTRANSCOM managed, **web-based**, computer system that provides visibility of air, sea, and land transportation assets and provides **aggregate reporting** of cargo and pax movements

2. Cargo Movement Operating System (CMOS): a **combat support system** that provides automated base level processing for cargo movement during peacetime and both cargo and pax movement during contingencies and for Air Expeditionary Forces (i.e. wartime)—USE IS MANDATORY!

3. Global Freight Management System (GFM): automated, DOD-wide, **freight traffic management system** containing a carrier tender database

4. Defense Personal Property System (DPS): a **self service**, web-based DOD program to support **household goods movements** for service members, civilian employees, and family members

5. Integrated Booking System: web-based, SDDC traffic management system that provides automated support for **booking export ocean cargo** via MSC or commercial ships—lead execution system for DTS for movement of military cargo by surface overseas

6. Worldwide Port System: provides information regarding cargo that arrived at the water ports and are awaiting shipment by sea

7. Global Air Transportation and Execution System (GATES): **AMC aerial port management system** at fixed locations—generates cargo, pax, and resource reports at headquarters or unit level

8. Automated Air Load Planning System (AALPS): knowledge based, expert system that assists users in the complex task of planning and execution of **aircraft loads** for all types of deployments—it’s DOD the aircraft loading planning system—**not web-based!!!!**

V. Objective 2a: Identify USAF cargo movement policies and procedures

A. Rules and Regulations: Cargo movement is a **compliance based system**

1. 49 Code of Federal Regulations (49 CFR): regulates shipments by all domestic **commercial modes** of transportation (air and surface)

2. DOD 4500.9R DTR Part II **Cargo Movement**: prescribes procedures and guidance, and assigns responsibilities for performing traffic management functions initiated or sponsored by DOD activities for transportation and movement of **materiel**

a. Military Standard Transportation and Movement Procedures (MILSTA**MP**) integrated into DTR Part II

3. AFI 24-203, Preparation and Movement of **Air Force Cargo**: assigns responsibilities and provides guidance and procedures on the planning, documentation, funding and other actions associated with the movement of **Air Force cargo** in support of peacetime, exercise, humanitarian and contingency operations

B. Cargo Movement Process

1. MILSTRIP (base supply) Shipments

a. SBSS automatically advances information into CMOS

b. DD Form 1348-1A is automatically generated

i. should contain all pertinent information including:

A. Funding data (TAC code)

B. Transportation Control Number (TCN)

C. Destination address

D. National Stock Number and Nomenclature

E. Quantity

c. Base supply will normally package, mark, and label MILSTRIP cargo prior to forwarding to Cargo Movement Section

2. Non-MILSTRIP (cargo from units or other shippers not associated with base supply)

a. Customer will bring property directly to Cargo Movement Section

b. Customer will provide DD Form 1149

c. Data entry into CMOS will need to be manually entered (hand jam)

d. Cargo Movement will package, pack, and preserve Non-MILSTRIP cargo

C. Key Concepts Associated with Cargo Movement Section

1. Uniform Material Movement and Issue Priority System (UMMIPS): maximum amount of time that should elapse during any given pipeline segment—**starts upon acceptance of cargo in the Cargo Movement system**

2. Segregation of Cargo: **physically separating** cargo after accepting it according to priority, type, or special handling requirements

3. Transportation Control Number (TCN): 17 character data element assigned to every shipment of cargo throughout the DTS made up of the following elements:

a. DoDAAC (physical address code)

b. Julian Date

c. Serial Number

d. Suffix

4. Shipment Priorities: determined based upon UMMIPS and Required Delivery Date (RDD)

a. TP-1 and TP-2 are air eligible

b. TP-3 will normally move via surface transportation

5. Required Delivery Date (RDD): establishes when cargo must arrive at its destination and affects the transportation priority—critical or expedited shipments are identified by a special designator on the DD 1348-1A or DD 1149

a. TP-1 shipments = 999, MICAP, or Non-Mission Capable Supply (NMCS)

b. TP-2 shipments = 777, 555, 444

i. **999 is the most urgent need**

6. Packing, Packaging, and Preservation

a. Packing: assembling of materiel into an exterior pack

b. Packaging: all encompassing term—methods and materials used to protect materiel from deterioration and damage

c. Preservation: process and procedures used to protect materiel against corrosion, deterioration and physical damage during shipment

7. Consolidation: combination of two or more small lot shipments into one container or one single shipment

a. Consolidation criteria:

i. **S**erviceable cargo

ii. **T**AC Code is the same

iii. **I**TV is maintained

iv. **N**o Delay occurs for any item

v. **C**ompatible cargo

vi. **S**ame consignee

8. Special Packaging Instructions (SPI): 4 types of SPI

a. Fast Pack—reusable containers with built in cushioning

i. Long life: can last 100 round trips—metal, plastic containers

ii. Short life: can last 10 round trips—fiberboard, wood containers

b. Standard Pack—cushioning is not built into the container

c. SPI Drawing—blue prints—detail special requirements for cushioning, blocking, bracing, and constructing containers

d. Narrative SPI—written instructions and references

9. DD Form 1387 Military Shipping Label: **required to be placed on all cargo in the DTS**, identifies origin, Port of Embarkation (POE), Port of Debarkation (POD), and final destination of shipment

a. also contains piece number, total pieces, weight, cube, transportation priority and TCN

D. Shipment Planning—coordinated decisions the Cargo Movement Section makes concerning warehousing, consolidating, packing and mode of transportation for shipments within the DTS

1. Shipment Planning Worksheet—it is either the DD 1348-1A or the DD 1149 depending on which type of shipment you have

2. Mode and Method

a. Mode: the category of movement—either **air or surface**

b. Method: the means of **movement within the mode**—truck, rail, military aircraft, commercial aircraft, or ship

3. Green and Purple Sheet procedures

a. Green Sheet: apply when cargo in the **AMC system gain movement precedence over other priority cargo of the same sponsoring service**

b. Purple Sheet: apply when cargo in the **AMC system gain movement precedence over other priority cargo in-transit to a Combatant Command (i.e. CENTCOM) to the same area of responsibility**

E. Export Shipments (shipments of cargo moving from the U.S. to another country)

1. Clearance Authority (ACA or WCA)—must approve the export shipment of cargo **prior to** the cargo arriving at the Aerial Port or Sea Port from which it will leave the country

2. Advanced Transportation Control Document (ATCMD)—DD Form 1384

a. Form sent to the ACA or WCA to give advanced notice that a ship is to be exported

b. Allows the ACA or WCA to determine if the receiving port of embarkation has sufficient capability to handle a shipment of cargo

c. Provides the Clearance Authority, ports, receivers, and other interested transportation personnel with advance notice of shipments and the information necessary to process the shipments throughout the DTS

i. additionally, the TCMD accompanies the cargo shipment through the entire shipment process

ii. TCMD is the basis for preparing manifests and compiling logistics management reports

3. World Wide Express (WWX): an AMC **commercial contract** that provides time-definite, door-to-door, international express delivery of letters and small packages

a. Requirements to use WWX

i. 150 lbs or less

ii. Non-HAZMAT

iii. Unclassified

4. Customs and Agriculture: the purpose is to eliminate the introduction of agricultural pests, diseases, illegal narcotics, and other contraband into the US or host nations through DOD channels

VI. Objective 2b: Identify sources of transportation funding

A. Responsible parties: **the shipper responsible for providing funding**

B. Transportation Account Codes (TAC): a four digit code that identifies service, agency, Foreign Military sales, or contractor account responsible for funding transportation charges

1. MILSTRIP shipments: SBSS electronically populates the TAC field on the DD 1348-1A

2. Non-MILSTRIP shipments: the customer’s O&M funds are normally used

3. Emergency and Special Programs: shipment documentation in support of deployments, contingencies, and other special projects are assigned a Joint Chiefs of Staff or AF Special Project code

C. Funding Categories

1. Defense Working Capital Fund (DWCF): a revolving fund that combines previously existing commercial or business operations under a single treasury account

2. Transportation Working Capital Fund (TWCF): part of the DWCF and pays for **transportation costs**—AMC monitors, maintains, and reports TWCF revenue actions

VII. Objective 2c: Describe surface cargo movement processes

A. Freight Tenders and Tariffs

1. Tender: a voluntary or negotiated **offer** by a qualified carrier to provide transportation service to the US government at a specified rate or charge and submitted by the carrier to a central authority for official acceptance and authorization for use to route traffic

a. usually divided between tenders for truck loads (TL) and less than truck loads (LTL)

i. TL = more than 10,000 lbs

ii. LTL = less than 10,000 lbs

2. Tariff: a **publication** containing rates, rules, regulations and charges applying to commercial or military transportation and accessorial services

B. Route Orders

1. Domestic Route Orders (DRO): routings within CONUS or between CONUS and Canada—valid for 90 days

2. International Route Orders (IRO): routings within or between OCONUS points

3. Export Traffic Release (ETR): for shipments moving from CONUS to OCONUS (requests made through SDDC for ocean shipments, through AMC for air shipments)

4. Standing Route Order (SRO): for repetitive shipments over a specific period of time—valid for up to 1 year

C. Payment process—PowerTrack is an electronic, internet-driven, freight transaction and payment system—use is mandatory—electronic funds transfer are available to carriers as early as 24 hours after confirmed delivery

D. Inbound Shipment Process

1. Inspecting incoming shipments: check the seals on the truck => conduct a tally count => check for visible damage => take photographs of any discrepancies => document discrepancies on the SF 361 => frustrate cargo => notify carrier and allow 7 days to correct any discrepancy

E. HAZMAT

1. Definition of HAZMAT: a substance or material the Secretary of Transportation determined to be **capable of posing unreasonable risk to health, safety, and property** when transported in commerce, and which has been so designated

2. Rules and Regulations governing HAZMAT

a. 49 CFR—THE LAW used to certify all domestic hazardous cargo moving by all modes

b. AFMAN 24-204(I), Preparing Hazardous Materials for **Military Air** Shipments: provides instructions for preparing HAZMAT for shipment aboard **military aircraft** to ensure the materials are packaged, packed, marked, labeled, and prepared properly for transportation when offered for shipment

c. International Air Transportation Associating (IATA): provides instructions for preparing HAZMAT for shipment aboard **commercial air carriers** either domestically or internationally

d. International Maritime Dangerous Goods Code (IMDG): provides instruction for the preparation of HAZMAT for shipment aboard **international vessels**

3. Marking: all HAZMAT are marked with the following information

a. Proper shipping name

b. Identification number

c. additional markings as required

4. Labeling: there are two types of labels: Hazard Labels and Handling Labels

a. Hazard Labels: required for most dangerous goods in all classes—diamond shaped and measure 4” by 4”

b. Handling Labels: rectangular in shape and give instructions on how to handle the HAZMAT

c. Placards: warning signs used to alert vehicle operators and other personnel of the presence of HAZMAT

i. must be placed on all four sides of a vehicle

ii. when loading or unloading an aircraft with HAZMAT must be placed at the front, tail, and each wing tip of the aircraft

5. Documentation

a. When HAZMAT travels via **surface commercial carrier** it is documented on the Commercial Bill of Lading (CBL)

b. When HAZMAT travels via **military or commercial air** it is documented on a Shipper’s Declaration of Dangerous Goods (Shipper’s Dec)

i. Shipper’s Dec must include: a red hash border, proper shipping name, hazard class, UN identification number, packing group, packaging paragraph, total quantity by weight or volume, and unit of measure of the HAZMAT

ii. Shipper’s Dec must be signed by a trained HAZMAT preparer

F. Classified and Protected Cargo

1. Protected Cargo: those items having characteristics that require that they be identified, accountable, secured, segregated, or handled in a special manner to ensure their safeguard or integrity—3 categories

a. Controlled: items that require additional control and security

i. money

ii. negotiable instruments

iii. narcotics

iv. registered mail

v. metal alloys

vi. ethyl alcohol

vii. drug abuse items

b. Pilferable: items that are vulnerable to theft because of their ready resale potential

i. cigarettes

ii. alcoholic beverages

iii. cameras

iv. electronic equipment

c. Sensitive: small arms, ammunition, and explosives

2. Classified Cargo

a. Top Secret: highest degree of protection—could cause **exceptionally grave damage** to national security

b. Secret: substantial degree of protection—could cause **serious damage** to national security

c. Confidential: requires protection—could cause **damage** to national security

3. Signature and Tally Record service: all classified, sensitive, and controlled shipments must have hand-to-hand receipt control using DD Form 1907 to maintain accountability

4. Report of Shipment (REPSHIP): prepares the Cargo Movement Element for the incoming shipment of HAZMAT or Classified cargo, and specifies the shipment’s characteristics

a. Must be sent by the shipper to the receiver Not Later Than (NLT) 2 hours after the cargo has shipped

b. REPSHIP may be classified if it contains classified material

VIII. Objective 2d: Describe air cargo movement processes

A. Regulations and Publications

1. DOD 4500.9R DTR, Part II, Cargo Movement: discussed above

2. DOD 4500.9R DTR, Part III, Mobility: provides **DOD procedures** and guidance for the **deployment, sustainment, and redeployment** of personnel, cargo, and equipment via all modes of transportation

3. DOD 4515.13R Air Transportation Eligibility: implements DOD policies governing the use of DOD-owned or controlled aircraft and **establishes criteria for cargo and pax movement**

4. AFI 10-403, Deployment Planning and Execution: provides the basic requirements for **Air Force deployment planning** and execution at all levels of command to support contingency and deployment operations

5. AFI 24-114, Small Air Terminal Operations: identifies **core air transportation** responsibilities required to support installation deployment officers and **small air terminal managers**

6. AMCI 24-101, Vol 11, Cargo and Mail: contains procedures and guidance designed to control and **monitor movement of cargo and mail** throughout the AMC airlift system

B. Receiving and Processing Routine Cargo

1. Small Air Terminal receives and processes routine cargo for air shipment

2. Cargo Movement Element will have already prepared the cargo for shipment, Small Air Terminal personnel need only to quality check the cargo

3. Special Handling concerns: **any cargo that is HAZMAT, Classified/Controlled or requires any other special handling must have a DD Form 1387-2, Special Handling/Data Certification attached**

4. Load Planning: Load Plans for routine missions are normally annotated on the AF Form 4080

a. AALPS load plans may also be used for routine airlift missions

5. **DD Form 1385, Cargo Manifest** must be completed for all DOD aircraft carrying cargo—provides a complete record of the actual movement of all cargo and mail aboard an aircraft on a particular flight or mission

C. Unit Moves: completion of shipment documentation is the responsibility of the deploying or redeploying unit—units must also provide their own load teams

1. Small Air Terminal have the following responsibilities for unit moves:

a. Joint Inspection (JI): inspection of aircraft loads by qualified representatives from the deploying unit and the support airlift representative

b. Load Planning: deploying units provide the load plans, but Small Air Terminal will **validate** the load plans

c. HAZMAT: deploying units will complete and certify their own HAZMAT, Small Air Terminal will **quality check** HAZMAT

d. Coordinate airflow information, control airlift aircraft, and supervise load teams

D. Airlift Mission types

1. AMC Channel Missions: scheduled and controlled by AMC’s Tanker Airlift Control Center (TACC)—move common user cargo and pax to **set locations**

2. Contingency or Exercise: TACC schedules and controls airlift missions supporting Joint Chiefs of Staff exercises and contingency requirements

3. Operational Support Aircraft (OSA): movement of high-priority space required pax or cargo with time, place, or mission-sensitive requirements

4. Special Assignment Airlift Mission (SAAM): provides special pick-up or delivery by AMC or theater airlift at points **outside of established AMC routes**—Small Air Terminal is the wing’s SAAM validator

5. Training Missions

E. 463L Pallet and Net Management: HQ AMC A4/T is the designated DOD Executive Agent for 463L equipment

1. Small Air Terminal is the base manager for 463L equipment—responsibilities include:

a. control, maintain, inspect, and report on base’s 463L assets

b. perform physical inventory of base’s 463L assets

c. revalidate 463L requirements

F. Material Handling Equipment (MHE)

1. 10K (standard) Forklift: designed for loading, unloading, and transporting 463L pallets and cargo—lifts up to 10,000 lbs

2. 10K (Adverse Terrain) AT Forklift: **four-wheel drive, off road, heavy, vehicle used at remote locations**—air transportable on C-17, C-130, and C-5 aircraft

3. 25K Halverson Loader: air transportable, **25,000** lbs capacity, self propelled, mobile, air cargo transporter/loader

4. 60K Tunner Loader: can carry up to **six** 463L pallets or **60,000** lbs